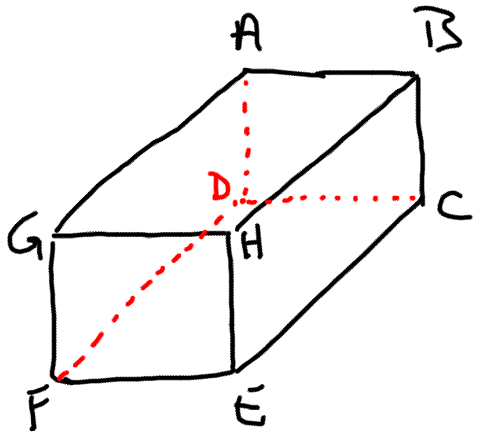
9/06/13

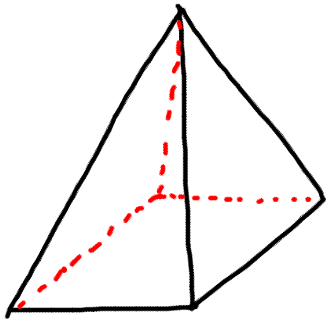
Goals: Apply the distance formula to solve problems involving perimeter.

- Warm up about labels and parts
- Section 1.3 - Distance Formula
  - Perimeter

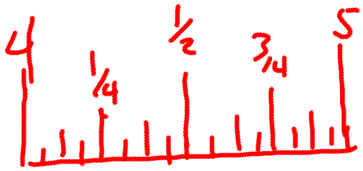
- Pass back Quizzes & Reflection Sheet
- Review Quiz & Fill out Reflection Sheet

- Worksheet for homework (Worksheet 4 - Distance Formula)





5.7 cm



$2\frac{7}{8}$ in.

Section 1.2/1.3/1.7 Target F Distance Formula

Distance on a number line:

$|\Delta|$ $|x_2 - x_1|$

$|-6-2|$ $|2--6|$

$|-8|$ $|8|$

8 8

-6 2

Distance

(x_1, y_1) (x_2, y_2)

$d = \sqrt{(x_2-x_1)^2+(y_2-y_1)^2}$

x_1, y_1 $(8,6)$

$(14,-2)$

x_2, y_2

$d = \sqrt{(14-8)^2+(-2-6)^2}$

$\sqrt{(6)^2+(-8)^2}$

$\sqrt{36+64}$

$\sqrt{100}$

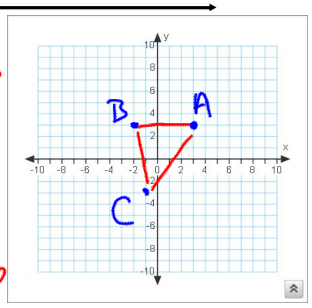
$d = 10$

Section 1.2/1.3/1.7 Target F Distance Formula

On a graph:

What is the perimeter?

DISTANCE AROUND AN OBJECT



$\triangle ABC$

$A(3,3)$

$B(-2,3)$

$C(-1,-3)$

FIND THE PERIMETER

$AB+BC+CA=P$

$AB=5$

$BC=6.1$

$CA=7.2$

18.3

$AB=\sqrt{(x_2-x_1)^2+(y_2-y_1)^2}$

$A(\overset{x}{3},\overset{y}{3})_1$

$B(-2,3)_2$

$\sqrt{(-2-3)^2+(3-3)^2}$

$AB=5$

$\sqrt{(-5)^2+(0)^2}$

$\sqrt{25}=5$

$BC=\sqrt{(-1--2)^2+(-3-3)^2}$

$\overset{x}{B}\ \overset{y}{(-2,3)}_1$

$C(-1,-3)_2$

$\sqrt{(1)^2+(-6)^2}$

$\sqrt{1+36}=\sqrt{37}$

$BC\approx 6.1$

$CA=\sqrt{(3--1)^2+(3--3)^2}$

$\overset{x,y}{C(-1,-3)_1}$

$A(3,3)_2$

$\sqrt{(4)^2+(6)^2}$

$\sqrt{16+36}=\sqrt{52}\approx 7.2$

$CA\approx 7.2$